

Translation

PATENT COOPERATION TREATY

PCT/FR2003/001219



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

10/511677

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| Applicant's or agent's file reference PL2 02018PCT | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
| International application No. PCT/FR2003/001219 | International filing date (day/month/year) 16 avril 2003 (16.04.2003) | Priority date (day/month/year) 17 avril 2002 (17.04.2002) |
| International Patent Classification (IPC) or national classification and IPC C03C 17/34 | | |
| Applicant SAINT-GOBAIN GLASS FRANCE | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.

3. This report contains indications relating to the following items:

- I Basis of the report
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

| | |
|--|--|
| Date of submission of the demand 02 septembre 2003 (02.09.2003) | Date of completion of this report 17 August 2004 (17.08.2004) |
| Name and mailing address of the IPEA/EP | Authorized officer |
| Facsimile No. | Telephone No. |

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International application No.

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I. Basis of the report

1. With regard to the elements of the international application:*

the international application as originally filed
 the description:

pages _____ 1-13 _____, as originally filed
 pages _____ , filed with the demand
 pages _____ , filed with the letter of _____

the claims:

pages _____ 1-26 _____, as originally filed
 pages _____ , as amended (together with any statement under Article 19)
 pages _____ , filed with the demand
 pages _____ , filed with the letter of _____

the drawings:

pages _____ 1/7-7/7 _____, as originally filed
 pages _____ , filed with the demand
 pages _____ , filed with the letter of _____

the sequence listing part of the description:

pages _____ , as originally filed
 pages _____ , filed with the demand
 pages _____ , filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
 These elements were available or furnished to this Authority in the following language _____ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
 the language of publication of the international application (under Rule 48.3(b)).
 the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.
 filed together with the international application in computer readable form.
 furnished subsequently to this Authority in written form.
 furnished subsequently to this Authority in computer readable form.
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, Nos. _____
 the drawings, sheets/fig. _____

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

| | | | |
|-------------------------------|--------|--------------------------------------|-----|
| Novelty (N) | Claims | <u>2, 3, 6-15, 17, 18, 20-24, 26</u> | YES |
| | Claims | <u>1, 4, 5, 16, 19, 25</u> | NO |
| Inventive step (IS) | Claims | <u>2, 3, 6-15, 17, 18, 20-24, 26</u> | YES |
| | Claims | <u>1, 4, 5, 16, 19, 25</u> | NO |
| Industrial applicability (IA) | Claims | <u>1-26</u> | YES |
| | Claims | | NO |

2. Citations and explanations**1. Documents**

Reference is made to the following documents:

D1: EP-A-1 132 133 (NANOPOUDRES TECHNOLOGIES) 12 September 2001 (2001-09-12)

D2: EP-A-0 882 686 (NIPPON SHEET GLASS CO LTD) 9 December 1998 (1998-12-09)

D3: WO 00 75087 A (HURST SIMON JAMES; PILKINGTON PLC (GB); AMMERLAAN JOHANNES ANDREAS) 14 December 2000 (2000-12-14)

D4: US 2001/030808 A1 (KOMATSU TORU ET AL) 18 October 2001 (2001-10-18)

D5: WO 01 32578 A (SAINT-GOBAIN GLASS FRANCE; DURANDEAU ANNE (FR); SIMONET MICHEL (FR) 10 May 2001 (2001-05-10)

2. Subject matter of the application

Claims 1 to 23 define a substrate having, for example, a glass, polymer or ceramic coating in, for example, sheet or fibre form, provided with a first silicon-compound-based (oxide, oxycarbide, oxynitride, oxycarbonitride) hydrophilic layer and a second titanium oxide photocatalytic coating, said second coating having a discontinuous/permeable structure. Claims 24 to 26 define

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the use of such a coated substrate.

3. Novelty and inventive step

D1 (see paragraph [0029], claims) describes a fibrous fabric, coated with a first layer of silicon nanoparticles and a second mesoporous photocatalytic layer.

Consequently, D1 describes all the features of claims 1, 4, 5, 16, 19 and 25.

The subject matter of claims 1, 4, 5, 16, 19 and 25 is therefore not novel.

D1 does not deprive the subject matter of claims 2, 3, 6 to 15, 17, 18, 20 to 24 and 26 of novelty and inventive step.

D2 to D5 are not prejudicial to the novelty and inventive step of the subject matter of the claims.